

feature of a claimed invention. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). In the instant case, the Examiner merely alleges that "Sawai discloses ... measuring a transmitted light intensities ... before, during and after mixing a reagent" but does not identify precisely where in Sawai et al. the aforementioned limitation is allegedly disclosed. At the end of the body of the rejection, the Examiner refers to numerous portions of Sawai et al. without explaining which portions are relevant to which claims, let alone the specific features of the respective claims. Accordingly, it is respectfully submitted that the pending ground of rejection does not establish a *prima facie* case of anticipation under § 102.

Nevertheless, it is respectfully submitted that Sawai et al. does not disclose or suggest, *inter alia*, "measuring a transmitted light intensities and/or a scattered light intensities of a solution to be detected containing a specific component **before and** after mixing a reagent" (emphasis added) as part of the combination of steps recited in claim 1. One of the potential benefits/advantages of the present invention as recited in claim 1 is the capability to more precisely measure solution concentration by eliminating the influences of turbidity (*see, e.g.*, page 28, line 19 - page 29, line 6 of Applicant's specification).

As a preliminary matter, it is not clear what the Examiner is relying on as the reagent in the process disclosed by Sawai et al.. Presumably, the Examiner is relying on the antigen and/or antibody as the "specific component" and the corresponding antibody and/or antigen, respectively, as the "reagent." However, Sawai et al. discloses measuring the absorbance of the *reaction* mixture. That is, the process of Sawai et al. measures the

absorbance only *after* the antigen and/or antibody is reacted with the corresponding antibody and/or antigen (*see, e.g.*, col. 3, lines 20-26). Sawai et al. is completely silent as to measuring the absorbance of the *non-reacted* solution *before* mixing the corresponding antibody/antigen.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed in a single prior art reference, *Akzo N.V. v. U.S. Int'l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), and because Sawai et al. does not disclose or suggest, *inter alia*, "measuring a transmitted light intensities and/or a scattered light intensities of a solution to be detected containing a specific component *before and after* mixing a reagent" (emphasis added) as recited in claim 1, it is submitted that Sawai et al. does not anticipate claim 1, nor any claim dependent thereon. In addition, it is submitted that dependent claims 2-6 are patentable based on their own merits by adding novel and non-obvious features to the combination.

Based on all the foregoing, it is submitted that claims 1-6 are patentable over Sawai et al.. Accordingly, it is respectfully requested that the rejection of claims 1-6 under 35 U.S.C. § 102 be withdrawn.

NEW CLAIMS

New claim 9 includes what is believed to be patentable subject matter of claim 2, new claim 10 includes what is believed to be patentable subject matter of claim 3, new claim 11 includes what is believed to be patentable subject matter of claim 4, and new claim 12 includes what is believed to be patentable subject matter of claim 6.

With respect to claims 9 and 10, it is submitted that Sawai et al. does not disclose or suggest, *inter alia*, "measuring a transmitted light intensities **and** a scattered light intensities" (emphasis added). Some of the potential advantages/benefits of the present invention as recited in claims 9 and 10 are described on page 11, line 22 - page 12, line 21 of Applicant's specification, in which it can be possible to determine the concentration of the specific component with high precision over a wider concentration region and/or detect false measurements.

It is respectfully submitted that Sawai et al. is completely silent as to measuring **scattered** light intensities, let alone measuring both transmitted **and** scattered light intensities. Indeed, the Examiner does not allege in the outstanding Office Action that Sawai et al. discloses or suggests measurement of "scattered light intensities." Accordingly, it is respectfully submitted that claims 9 and 10 are patentable over Sawai et al..

With respect to claim 11, it is submitted that Sawai et al. does not disclose or suggest, *inter alia*, "wherein at least one of the transmitted light intensities and the scattered light intensities . . . is measured under the same condition for a standard solution with a known concentration and said solution to be detected, and the measured values of said solution to be detected are corrected by the measured values of said standard solution to determine the concentration of said specific component in said solution to be detected." Some of the potential advantages/benefits of the present invention as recited in claim 11 are described on page 12, line 22 - page 13, line 9 of Applicant's specification, in which it can be possible to eliminate the influences of a reduced transmittance of the optical window so that a higher precision measurement can be made possible.

It is respectfully submitted that Sawai et al. is completely silent as to correcting the measured values of the alleged solution to be detected, let alone corrected by the measured values of a standard solution. Accordingly, it is respectfully submitted that claim 11 is patentable over Sawai et al.. It is noted that the Examiner alleges that "Sawai et al. discloses comparing the measured values against the known values to detect false measurement due to unwanted particle suspended in the solution (base line vs. known concentration)." However, as mentioned above, it is not clear precisely what portion of Sawai et al. the Examiner is relying on for disclosing this feature.

Nevertheless, it is submitted that the use of "known values" in the process of Sawai et al. is simply directed to the conventional manner of determining unknown values of concentration by using a calibration curve (*see* col. 12, lines 22-52). Sawai et al. does not suggest a process by which the determined values of the unknown concentrations are corrected, let alone by ***measured*** values of a standard solution (*see* page 32, third line from bottom - page 34, line 20 of Applicant's specification).

With respect to claim 12, it is submitted that Sawai et al. does not disclose or suggest, *inter alia*, "determining the concentration of said protein ...; determining a concentration of an optical active substance other than said protein ... by measuring the optical rotation of said solution to be detected before the mixing of said reagent"

It is respectfully submitted that Sawai et al. is completely silent as to determining a concentration of an optical active substance other than said protein (antibody/antigen), let alone by measuring the optical rotation of said solution to be detected before the mixing of said reagent. Indeed, the Examiner does not allege in the outstanding Office Action that Sawai et al. discloses or suggests measuring ***optical rotation*** of the solution, let alone

determining the concentration of a substance other than said protein. Accordingly, it is respectfully submitted that claim 12 is patentable over Sawai et al..

CONCLUSION

Having fully responded to all matters raised in the Office Action, Applicant submits that all claims are in condition for allowance, an indication for which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicant's attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

Michael E. Fogarty #46,692
f/cv Michael E. Fogarty
Registration No. 36,139

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 MEF:amz
Facsimile: (202) 756-8087
Date: May 22, 2003

APPENDIX

6. (Amended) A method for measuring a concentration of solution, comprising the steps of:

determining the protein concentration of said solution to be detected with said method for measuring a concentration of solution in accordance with claim 1;

determining a concentration of an optical active substance [as said specific component] in said solution to be detected by measuring the [optiacal] optical rotation of said solution to be detected before the mixing of said reagent; and then

determining the concentration of the optical active substance other than said protein from said protein concentration and said optical [active substance] rotation.